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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,266	03/10/2004	Yu Deng	200314604-1	5355
	590 12/28/200 CKARD COMPANY	EXAMINER		
	0, 3404 E. HARMON	PONIKIEWSKI, TOMASZ		
INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			ART UNIT	PAPER NUMBER
	,	2165		
,				
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE
3 MON	THS	12/28/2006	PAF	PER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)			
Office Action Summary		10/797,266	DENG ET AL.			
		Examiner	Art Unit			
		Tomasz Ponikiewski	2165			
	The MAILING DATE of this communication app		orrespondence address			
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS,						
WHIC - Exter after - If NO - Failu Any	CHEVER IS LONGER, FROM THE MAILING D. sicions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period or reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timwill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. tely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on <u>06 N</u>	ovember 2006.				
2a)□	This action is FINAL . 2b)⊠ This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims	. **				
4)⊠ Claim(s) <u>11-20</u> is/are pending in the application.						
4a) Of the above claim(s) 1-10, 21-25 is/are withdrawn from consideration.						
·	Claim(s) is/are allowed.	•				
	Claim(s) <u>11-20</u> is/are rejected.					
•	Claim(s) is/are objected to.	r cleation requirement				
8) Claim(s) are subject to restriction and/or election requirement.						
Applicati	ion Papers					
9)	The specification is objected to by the Examine	er.				
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
اــا(۱۱	The oath or declaration is objected to by the Ex	Rammer. Note the attached Office	Action of form FTO-192.			
Priority (ınder 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
		·				
Attachmen	t(s)					
	te of References Cited (PTO-892)	4) Interview Summary Paper No(s)/Mail Da				
3) 🛛 Infor	te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) or No(s)/Mail Date 3/10/2004.	5) Notice of Informal P 6) Other:				

DETAILED ACTION

1. Claims 11-20 are pending. Claims 1-10 and 21-25 are withdrawn from consideration.

Election/Restrictions

2. Claims 1-10 and 21-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group I, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 14 August 2006.

Claim Objections

3. Claim 16 objected to because of the following informalities:

Claim 16 recites the word "for" in line 2. It indicates intended use and as such does not carry patentable weight. The word could be changed to recite "to". The limitations following the phrase "for" describes only intended use but not necessarily required functionality of the claim. Limitations following the phrase "for" do not carry patentable weight, which cause the claims to appear as a series of non-functional descriptive material/data without any functional relation with each other. Applicant is required to amend the claims so that the claim limitations are recited in a definite form. For example, claim 1 recites "for suggesting" should be "to suggest".

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Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 11-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 11 lacks the hardware to make the invention statutory. As presented the claims describe software only implementation. To overcome this problem, some hardware (ex. processor or storage) should be added to the claims.

Claim 18 list a condition "when executed by a processor". The condition leave an option of when it is not executed on a processor, the limitations would not be accomplished. The examiner suggests to amend the claim to say "... a program executable on a processor:".

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 2 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 and 19 recites the limitation "the dependant relationships" in lines 2 and 3 respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 9. Claims 11-12, 15 and 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Kirkwood et al. (US 7, 139, 973 B1).

As per claims 11 and 18 <u>Kirkwood et al.</u> is directed to a method and a computer readable medium, comprising:

generating a node to represent a functional relationship between one or more objects of distinct ontologies in a metadata system (Kirkwood, column 11, lines 66-67; column 12, lines 1-7);

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associating an expression of the functional relationship to the node; and associating one or more parameters of the functional relationship to the node (column 17, lines 16-23).

As per claims 12 and 19 <u>Kirkwood et al.</u> is directed to further comprising associating a dependency chain representing the dependent relationships between properties of a parameter path associated with the one or more parameters of the functional relationship (column 36, lines 45-48).

As per claim 15 <u>Kirkwoodet et al.</u> is directed to identifying mappings between dependency chains spanning the distinct ontologies (column 36, lines 45-48).

As per claim 17 <u>Kirkwood et al.</u> is directed to maintaining the mappings that span the distinct ontologies when one of the distinct ontologies is modified (column 12, lines 36-49.

Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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11. Claims 13-14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirkwood et al. (US 7, 139, 973 B1) in view of <u>Pourheidari</u> (US 2004/0243613 A1).

As per claim 13 <u>Kirkwood et al.</u> does not teach associating one or more parameters comprises generating a resource that aggregates a local name, type, and dependency chain.

<u>Pourheidari</u> teaches associating one or more parameters comprises generating a resource that aggregates a local name, type, and dependency chain (<u>Pourheidari</u>, paragraph 0079, lines 5-12).

It would have been obvious to one in of ordinary skill in the art at the time the invention was made to modify <u>Kirkwood et al.</u> by teachings of <u>Pourheidari</u> to include associating one or more parameters comprises generating a resource that aggregates a local name, type, and dependency chain because more efficient to store numerous data under one reference.

As per claim 14 <u>Kirkwood et al.</u> does not teach associating one or more parameters comprises generating a resource that aggregates a type and a dependency chain and that is associated to a name through an explicit mapping.

<u>Pourheidari</u> teaches associating one or more parameters comprises generating a resource that aggregates a type and a dependency chain and that is associated to a name through an explicit mapping (<u>Pourheidari</u>, paragraph 0079, lines 5-12).

It would have been obvious to one in of ordinary skill in the art at the time the invention was made to modify <u>Kirkwood et al.</u> by teachings of <u>Pourheidari</u> to include associating one or more parameters comprises generating a resource that aggregates a type and a dependency chain and that is associated to a name through an explicit mapping because more efficient to store numerous data under one reference.

As per claim 20 <u>Kirkwood et al.</u> does not teach the program further causes the processor to connect one or more parameters comprising generating a blank node that aggregates a local name, type, and dependency chain.

<u>Pourheidari</u> teaches the program further causes the processor to connect one or more parameters comprising generating a blank node that aggregates a local name, type, and dependency chain. (<u>Pourheidari</u>, paragraph 0079, lines 5-12).

It would have been obvious to one in of ordinary skill in the art at the time the invention was made to modify <u>Kirkwood et al.</u> by teachings of <u>Pourheidari</u> to include the program further causes the processor to connect one or more parameters comprising generating a blank node that aggregates a local name, type, and dependency chain because more efficient to store numerous data under one reference.

Claim Rejections - 35 USC § 103

- 12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claim 16 rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Kirkwood</u> et al. (US 7, 139, 973 B1) in view of <u>Govindugari et al.</u> (US 2004/0083199 A1).

As per claim 16 <u>Kirkwood et al.</u> does not teach the identifying further comprises utilizing heuristics for suggestions of alternative mappings between dependency chains.

Govindugari et al. teaches the identifying further comprises utilizing heuristics for suggestions of alternative mappings between dependency chains (Govindugari et al., paragraph 0200, lines 1-3; paragraph 0201).

It would have been obvious to one in of ordinary skill in the art at the time the invention was made to modify <u>Kirkwood et al.</u> by teachings of <u>Govindugari et al.</u> to include the identifying further comprises utilizing heuristics for suggestions of alternative mappings between dependency chains because heuristics is a well known method in the art to determine similarities.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Stoffel et al. (US 6,289,338 B1) teaches using probabilistic ontology.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tomasz Ponikiewski whose telephone number is (571)272-1721. The examiner can normally be reached on 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (571)272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have guestions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

December 21, 2006